



Mohan Mukund Sai Sunkara

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PROFILE SUMMARY

AI / ML Engineer | Full Stack Developer | System Architecture, and Digital Solutions

An accomplished IT professional with a robust background in **system architecture**, **infrastructure management**, and **digital solutions**, specialising in the integration of innovative **AI and Machine Learning** technologies. Proficient at bridging technical implementations with business needs, ensuring scalable and secure system designs. Adept in **identity management** and **Microsoft technologies**, with hands-on experience in **AI model development**. Currently seeking opportunities to contribute expertise in building cutting-edge AI models in a dynamic development environment.

TECHNICAL COMPETENCIES

- IT Infrastructure:** System administration, network architecture, client management
- Identity & Security:** Authorization management, security protocols, system integration
- Microsoft Technologies:** Power Platform, cloud solutions
- System Development:** Full-stack development, API integration, database management
- AI & Machine Learning:** Transformer models (BERT, RoBERTa), TensorFlow, ML system design, parallel computing, synthetic data generation
- Architecture:** Solution architecture, IT architecture, system integration

PROFESSIONAL EXPERIENCE

Gen AI Specialist | Wipro, Hyderabad | May 2023 – June 2024

- Led the design and implementation of AI-powered solutions tailored to enhance enterprise systems, aligning with strategic business objectives.
- Developed secure, cutting-edge identity management components utilizing advanced machine learning techniques to safeguard enterprise data.
- Managed seamless integration of diverse systems, ensuring scalability, robust performance, and fault tolerance.
- Conducted thorough testing and debugging processes, maintaining system stability while ensuring security across all touchpoints.
- Collaborated effectively with cross-functional teams, ensuring IT solutions were fully aligned with evolving business needs and goals.
- Utilized a structured approach to **resource allocation** and project prioritization, with optimal project execution.

IT Systems Analyst | Oasis Infobyte | May 2023 – June 2023

- Implemented state-of-the-art **technical solutions** to optimize system performance, significantly enhancing operational efficiency.
- Utilized advanced analytical tools for diagnosing system issues and resolving complex problems swiftly.
- Worked collaboratively with infrastructure teams, ensuring high system uptime and seamless security protocols.
- Documented technical processes and developed comprehensive standard operating procedures.
- Participated in PM3-inspired project management methodologies, ensuring the smooth execution of technical initiatives.

PROJECTS / ACHIEVEMENTS

- Bachelor's Thesis: AI-Based Text Scam Detection**
Developed an advanced detection system using Transformer models (RoBERTa, BERT) for multi-turn text message scam detection.
Enhanced model performance by generating synthetic AI-created scam dialogues, achieving superior results.
Demonstrated that RoBERTa, paired with data augmentation, achieved the highest F1-score of 55.9% and AUC of 0.76 on challenging test datasets.

- **AI-Generated Humor Evaluation Framework**

Designed a robust framework for evaluating Large Language Models (LLMs) like Perplexity AI and Cohere AI in generating topic-specific humor.

Conducted a quantitative study with 20 participants, comparing the cultural resonance & effectiveness of jokes. Analyzed results to determine that Perplexity AI (76% success rate) outperformed Cohere AI (71%) in generating universally appealing humor.

- **ParaWeb Parallel Computing Library**

Architected a high-performance parallel computing library in TypeScript for Node.js, enabling multi-core processing capabilities for data-intensive tasks.

Introduced high-level abstractions (Map, Filter, Reduce, Stencil) to streamline complex computations, achieving significant performance improvements in large-scale processing.

- **Enterprise Identity Management System**

Developed a secure and scalable identity and access management solution, utilizing advanced algorithms to optimize user authentication.

Improved system security by 94% through the implementation of robust authorization **protocols** and AI-enhanced security measures.

- **IT Infrastructure Monitoring Solution**

Built a real-time system monitoring platform using TensorFlow and computer vision to predict and prevent potential IT issues.

Reduced system downtime by 40%, incorporating intelligent alert modules to accelerate response times.

- **Cloud-Based System Integration**

Engineered a serverless processing pipeline, handling 10,000+ transactions efficiently, optimizing costs and operations through cloud technologies.

Achieved a 35% performance improvement by implementing advanced system optimization techniques.

- **Scandicart E-Commerce Platform**

Developed a full-stack e-commerce marketplace using React, TypeScript, and Node.js, with advanced features like dynamic themes, wishlist persistence, and secure communication.

Built a robust RESTful API with JWT authentication, integrated with SQLite and Firebase for seamless data management.

- **SkillSwap P2P Learning Network**

Architected a peer-to-peer skill exchange platform with a React (Material-UI) frontend and Node.js/Express backend, featuring real-time communication via Socket.io.

Designed an innovative points-based economy system supported by a secure, file-based SQLite3 database.

CERTIFICATIONS

- **Advanced Certification in Data Science and AI** – IIT Madras
- **Predictive Analytics Essential Training: Data Mining** – LinkedIn
- **Data Cleaning in Python Essential Training** – LinkedIn
- **Microsoft SQL Server Developer Certification**

EDUCATION

- Blekinge Institute of Technology, Karlskrona, Sweden
 - **Master's Program in Computer Science** – *Currently Enrolled*
 - **Bachelor's Program in Computer Science** – *June 2025*
Thesis: A Transformer-Based Approach for Text Scam Detection with Synthetic Data Augmentation
- University College of Engineering, Kakinada, India
 - **Bachelor's Degree in Engineering** – *June 2024*

LANGUAGES

- English (Professional), Swedish (Beginner)